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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,231	05/07/2001	Peter Krulevitch	IL-10581	3998

7590

08/11/2003

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EXAMINER

SIMONE, CATHERINE A

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 08/11/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/851,231

Applicant(s)

KRULEVITCH ET AL.

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 11-16** are rejected under 35 U.S.C. 102(b) as being anticipated by Lum et al. (5,932,315).

Lum et al. discloses an apparatus having at least one sealed microchannel therein, comprising a first substrate (Fig. 1A and 1B, #104), at least one etched microchannel (Fig. 1A and 1B, #120) in the first substrate, a second substrate (Fig. 1A and 1B, #102) positioned on the first substrate that covers the at least one etched microchannel (Fig. 1B, #120) in the first substrate (Fig. 1B, #104), a corresponding at least one annealed microchannel (Fig. 1A and 1B, #110) in the second substrate immediately above the at least one microchannel (Fig. 1A and 1B, #120) in the first substrate, and a bond connecting the first substrate and the second substrate (see col. 7, lines 20-24), wherein the at least one etched microchannel (Fig. 1B, #120) and the at least one annealed microchannel (Fig. 1B, #110) comprise the at least one sealed microchannel (Fig. 1B, #130). Regarding **claim 12**, note the at least one sealed microchannel has no sharp corners therein (Fig. 1B, #130). Regarding **claim 13**, note the at least one etched microchannel (Fig. 1B, #120) in the first substrate (Fig. 1B, #104) and the corresponding at least one annealed microchannel (Fig. 1B, #110) in the second substrate (Fig. 1B, #102) form a circular at least one

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sealed microchannel (Fig. 1B, #130). Regarding **claim 14**, note the first substrate is silicon (see col. 6, lines 8-9). Regarding **claim 15**, note the bond comprises fusion bonding (see col. 7, lines 20-26). Regarding **claim 16**, note the second substrate is silicon (see col. 6, lines 8-9).

Response to Arguments

3. Applicant's arguments filed June 11, 2003 have been fully considered but they are not persuasive. Applicant states, "Since the structural elements of the claims now presented for examination are not shown by the Lum et al reference, the rejection is unsupported by the art and should be withdrawn". However, the Lum et al. reference clearly teaches the structural elements of the claims now presented and is shown above in the 102 rejection. Therefore, the rejection stands.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (703) 605-4297.

The examiner can normally be reached on 9:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Catherine Simone
Examiner
Art Unit 1772

August 6, 2003



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772 8/6/03